Message

From: Drue Winters [dwinters@fisheries.org]

Sent: 3/3/2020 5:58:07 PM

To: Guillaume Salze [gsalze@gmail.com]; Mike Rust - NOAA Federal [mike.rust@noaa.gov]

CC: Molloy, Jennifer [molloy.jennifer@epa.gov]; Jesse Trushenski [jesse@riverence.com]; Watson, Craig A

[cawatson@ufl.edu]

Subject: RE: Bios for aquaculture webinar

Attachments: ATT00001.txt

I met with Kat Montgomery today in Wicker's office. She wasn't sure what she could disclose about their bill when I inquired, but she was able to tell me that a House bill is expected to drop next week. I didn't want to push too hard since she's only been working there a month and she's just getting her sea legs. (I'm funny.) I presume Palazzo is the sponsor since he's done so in the past, but I'll keep you posted.

From: Guillaume Salze <gsalze@gmail.com> Sent: Monday, March 2, 2020 11:45 AM

To: Mike Rust - NOAA Federal < mike.rust@noaa.gov >

Cc: Drue Winters < dwinters@fisheries.org; Molloy, Jennifer molloy.jennifer@epa.gov; Jesse Trushenski

<jesse@riverence.com>; Watson, Craig A <cawatson@ufl.edu>

Subject: Re: Bios for aquaculture webinar

From what I hear, the Wicker bill is frozen because of the election. If they were putting it forward it would be rejected and killed, but by holding it they're keeping it alive, albeit dormant. Or at least that's my (limited) understanding...

Cheers,

On Fri, Feb 28, 2020, 12:12 Mike Rust - NOAA Federal < mike.rust@noaa.gov > wrote:

I don't have any updates on the Wicker bill but Ali might have some insight when you talk to her.

On Fri, Feb 28, 2020 at 8:54 AM Drue Winters dwinters@fisheries.org wrote:

I'll try to write a new column for Fisheries on marine aquaculture, touching on the Kampachi permit. I've been waiting to see what will happen with Wicker's bill...any word on that? I am meeting with his Sea Grant Fellow next week. Happy to get your thoughts on an angle.

From: Mike Rust - NOAA Federal <mike.rust@noaa.gov>

Sent: Thursday, February 27, 2020 4:13 PM

To: Molloy, Jennifer < molloy.jennifer@epa.gov>

 $\textbf{Cc:} \ \ \text{Guillaume Salze} < \underline{\text{gsalze@gmail.com}} >; \ \ \text{Drue Winters} < \underline{\text{dwinters@fisheries.org}} >; \ \ \text{Jesse Trushenski}$

<jesse@riverence.com>; Watson,Craig A <cawatson@ufl.edu>

Subject: Re: Bios for aquaculture webinar

For those interested in the fish meal and fish oil story, the attached just came out....

Some bottom lines:

Fish meal produced by rendering wild stocks has decreased from about 6 MMT in the early 2000's to 4ish MMT currently. This is due to increased use of these fish for human consumption. They are still being caught, but the amount going to FM is less.

The shortage from wild caught fish is being made up by increasing use of fish trimmings, so the total amount of fish meal available is still around 6MMT. So the overall production has been remarkably stable given the underlying changes in supply and demand.

A similar story for fish oil with the added input of non-fish produced EPA and DHA....

An important point is that even if aquaculture used zero wild fish as inputs, there would still be a market for all these wild fish stocks....also the only place to get large increases in fish meal and fish oil production will be from the trimmings of farmed fish. That may impact demand for wild stock sources but not for a long long long time.

Trimmings from aquaculture fish was not separated out in the attached report (unless I missed it?), but at the risk of spreading anecdotal information.... I was able to visit a salmon processing plant in Norway last year and all their trimmings went into pet foods. Evidently this is a higher value market than aquaculture and the farmed salmon trimmings commanded a premium due to their freshness. Indeed, the pet food plant was located on the same site and the trimmings were pumped from the salmon processing plant directly to the pet food plant on a continuous basis when the plant was running. The trimmings were no older than 90 minutes from the salmon's death when they were delivered to the pet food plant and never experienced temperatures above 4C.

I also did some looking into the IUU question and the issue is largely with small mixed stock fisheries that feed aquaculture that uses wet fish diets. Effectively feeding bait. This does not occur in the US, but it is common in some parts of the world where the same company will own a fish farm and a fishing boat. They catch whatever they can and then dump it into the cages. Mixed stock fisheries like this are a bear to manage and they do lend themselves to abuse. The best thing that aquaculture could do to address this issue is to make modern formulated compounded feeds (pellets) available and more cost effective than wet fish feeding in these parts of the world. By and large the 20 or so large stocks that catch a single species for rendering into fishmeal are well managed.

On Thu, Feb 27, 2020 at 12:44 PM Molloy, Jennifer < molloy.jennifer@epa.gov > wrote: I've already received some positive feedback from a couple of attendees. So, well done everyone! We still have 53,000 comments to respond to on the Kampachi permit, but maybe the next one won't be so bad(?). Jenny Molloy U.S. EPA Water Permits Division 202.564.1939 mollov.jennifer@epa.gov From: Mike Rust - NOAA Federal <mike.rust@noaa.gov> Sent: Thursday, February 27, 2020 3:38 PM **To:** Guillaume Salze <gsalze@gmail.com> Cc: Drue Winters dwinters@fisheries.org; Jesse Trushenski jesse@riverence.com; Molloy, Jennifer <molloy.jennifer@epa.gov>; Watson,Craig A <cawatson@ufl.edu> Subject: Re: Bios for aquaculture webinar Let me add my thanks! I hope it lived up to expectations. On Thu, Feb 27, 2020 at 11:28 AM Guillaume Salze <gsalze@gmail.com> wrote: Thanks Drue and Lauren for putting this together and filtering the questions! Guillaume-On Thu, Feb 27, 2020 at 1:05 PM Drue Winters dwinters@fisheries.org wrote:

Thanks all! That was more nerve wracking than the live briefing!
From: Jesse Trushenski < <u>jesse@riverence.com</u> > Sent: Thursday, February 27, 2020 2:04 PM To: Drue Winters < <u>dwinters@fisheries.org</u> > Cc: Guillaume Salze < <u>gsalze@gmail.com</u> >; Michael Rust < <u>mike.rust@noaa.gov</u> >; Molloy, Jennifer < <u>molloy.jennifer@epa.gov</u> >; Watson,Craig A < <u>cawatson@ufl.edu</u> > Subject: Re: Bios for aquaculture webinar
Great job, everyone! And special thanks to Drue and Lauren for herding the cats!Jesse
JESSE TRUSHENSKI, PHD Director of Science (618) 559-9397 Riverence.com
On Wed, Feb 26, 2020 at 2:00 PM Drue Winters < dwinters@fisheries.org > wrote:
Hi all:
Attached please find my remarks for tomorrow. Please review your bios and let me know if you have any edits.
Thanks and looking forward to tomorrow!
Drue

Michael Rust, PhD
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206.860.3382
http://www.nmfs.noaa.gov/aquaculture/homepage_stories/18_aquaculture_research_story_map.html

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